

REMARKS

Claims 1-3 and 5-10 remain pending in this application with claims 1, 5, and 10 being amended and claims 4 and 11 being cancelled by this response.

Claim 1 has been amended to include the limitations of original claim 4, claim 4 being cancelled. Claim 1 has been further amended to recite that "marking is implemented through luminance values of these macroblocks". Support for this amendment can be found, for example, on page 10, lines 12-13 which recites that "[T]he information item relating to the exclusion zone is carried by the luminance values." Claim 5 has been amended to depend from claim 1 as opposed to now cancelled claim 4. Claim 10 is also amended by this response. Support for the amendments to claim 10 can be found, for example, in figure 4 where the signal I_R coming from the memory 11 (page 10, lines 23-24) is transmitted to the circuit 17 for calculating motion vectors circuits (page 10, line 9) through circuits 18 (transcoding circuit) and 19 (marking circuit).

Rejection of claims 1-7, 10 and 11 under 35 U.S.C. 103(a)

Claim 1-7, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki in view of Chen et al.

The present claimed invention recites a device and process for coding images according to the MPEG standard, for the inseting of at least one imagette into an image, utilizing the inter mode with motion estimation with respect to a reference image and the intra mode. An exclusion zone which includes the macroblocks which lie even partially in the location of the imagette is defined in the reference image. The motion estimation of the macroblocks of the image not belonging to the exclusion zone does not take account of an image block belonging to the exclusion zone in the reference image. The macroblocks of the reference image belonging to the exclusion zone being implemented through luminance values of these macroblocks are marked in

order to perform said motion estimation. Macroblocks belonging to the exclusion zone of the image are then replaced by macroblocks making up the imagette.

Specifically, claim 1 recites:

“the motion estimation of the macroblocks of the image not belonging to the exclusion zone does not take account of an image block belonging to the exclusion zone in the reference image, marking of the macroblocks of the reference image belonging to the exclusion zone being implemented through luminance values of these macroblocks in order to perform said motion estimation...”

Sasaki discloses a picture signal encoding system capable of transmitting a motion picture at an extremely low rate while controlling the occurrence of a retransmission mode and the occurrence of a picture freeze. The encoder system integrally performs an alteration of the syntax, the substitute of the code word, the adaptive control for the prediction of the current frame encoding attribute based on the past encoding attribute and the attribute decision, the object area extraction based on the motion and a model, the area-separated quantization control, and the control of the necessary number of transformation coefficients according to the use modems the transmission rate and the motion occurrence quantity. However, Sasaki neither discloses nor suggests “marking of the macroblocks of the reference image belonging to the exclusion zone being implemented through luminance values of these macroblocks in order to perform said motion estimation” as in the present claimed invention. The transcoding and marking steps of the present claimed invention simplify the coding process and the coding device.

Chen discloses a technique for implicitly encoding shape information by using a chroma-key color. Similarly to Sasaki, Chen neither discloses nor suggests “marking of the macroblocks of the reference image belonging to the exclusion zone being implemented through luminance values of these macroblocks in order to perform said motion estimation” as in the present claimed invention. As discussed above, the transcoding and marking steps of the present claimed invention simplify the coding process and the coding device.

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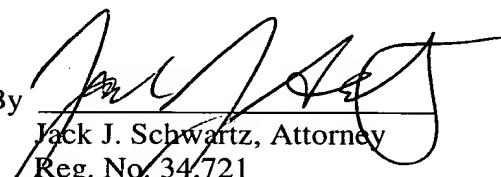
In view of the above remarks, it is respectfully submitted that the present claimed invention is not unpatentable over Sasaki in view of Chen. Thus, it is further respectfully submitted that this rejection is satisfied and should be withdrawn.

Since the present claims set forth the present invention patentably and distinctly, and are not taught by the cited art either taken alone or in combination, this response is believed to place this case in condition for allowance and the Examiner is respectfully requested to reconsider the matter, and to allow all of the claims in this case.

Should the Examiner feel that anything further is necessary to place this application in condition for allowance he is respectfully requested to contact applicants attorney at the telephone number listed below.

No other fee is believed due. However, if an additional fee is due, please charge the fee to Deposit Account 07-0832.

Respectfully submitted,
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